

which will secure the general peace of the world."

He added that his mission came from the Prophet, who had not been able to fulfill it. "Follow me, therefore," he cried, "for I am the Mahdi, and I will lead you into the kingdom which Allah has prepared for the Faithful." He referred, of course, to the Mohammedan tradition that another and last Prophet is to come, with the name of the Mahdi—that is, "Given by Allah."

## THE STORY-TELLER.

### LITTLE WHITE SOULS.

By Florence Marryat.

AUTHOR OF "FIGHTING THE AIR,"  
"LOVE'S CONFLICT," ETC., ETC.

I am going to tell you a story which is as improbable as one as you have ever heard. I do not expect anybody to believe it; yet it is perfectly true. The ignorant and bigoted will read it to the end perhaps, and then fling it down with the assertion that it is all nonsense, and there is not one word of truth in it. The wiser and more experienced may say it is very wonderful and incredible, but still they know there are more things in Heaven and earth than are dreamt of in their philosophy. But no one will credit it with a hearty uncompromising belief. And yet neither ridicule nor incredulity can alter the fact that it is a true history of circumstances that occurred but a few years since, and of two persons who are living at the present time. The scene is laid in India, and to India therefore I must transport you in order that you may be introduced to the actors in this veracious drama, premising that the names I give, not only of people but of places, are all fictitious. It is Christmas time in a single station on the frontiers of Bengal, and a very dull Christmas the members of the 145th Bengal Mufitis find it in consequence; for to be quartered in a single station means to be compelled to associate with the same people day after day, and month after month, and year after year; and to carry on that old quarrel with Jones, or to listen to the cackle of Mrs. Robinson, or to be bored with the twaddle of Major Smith, without any hope of respite or escape; and leaving the gentlemen out of the question, and the ladies of the 145th Bengal Mufitis are not in the best frame of mind at the time my story opens to spend the day of peace and good-will towards men together. Regimental ladies seldom are. They are quarrelsome and interfering and backbiting enough towards each other in an English garrison town, but that is a trifle compared to the way in which they carry on in our outlying stations in India. And yet the ladies of the 145th Bengal Mufitis are not bad specimens of their sex, taken individually. It is only when they come in contact that their Christian love and charity make themselves conspicuous. Mrs. Dunstan, the wife of the colonel, is the most important of them all, and the most important personage, too, in this little story of a misfortune that involved herself; therefore let Mrs. Dunstan be the first to advance for inspection. As we meet her, she is seated in a lounging-chair in her own drawing-room at Mudlianah, with a decided look of discontent or unhappiness upon her countenance. The scene around her would seem fair enough in the eyes of those who were not condemned to live in it. Her room is surrounded by a broad verandah, which is so covered by creepers as to be a bower of greenery. Huge trumpet-

shaped blossoms of the most gorgeous hues of purple, scarlet, and orange hang in graceful festoons about the window and open doorways, whilst the starry jessamine and Cape honeysuckle fill the air with sweetness. Beyond the garden, which is laid out with much taste, though rather in a wild and tangled style, owing to the luxuriance of the vegetation, lies a range of snowy hills which appear quite close in the transparent atmosphere, although in reality they are many miles away. Mrs. Dunstan's room is furnished, too, with every luxury, as befits the room of a colonel's wife, even in an up-country station. The chairs and sofas are of carved ebony wood and cane work from Benares; the table is covered with flowers, books and fancy work; a handsome piano stands in one corner; the floor is covered with colored matting, and in the verandah are scattered toys from various countries, a token that this comfortable home does not lack the chief of married joys, a child-angel in the house. The mistress, too, is still young and still handsome, not wanting the capacity for intellectual, nor the health for physical enjoyment. There must be some deeper reason than outward discomfort therefore for that sad far-away look in her eyes and the pain which has knitted her brow. Yes, 'Mees Margie MacQuirk' (as she would style herself) had been giving Mrs. Dunstan an hour of her company that morning, and as usual had left her trail behind her. 'Mees Margie' is a tall, quaint, ill-favored Scotchwoman on the wrong side of fifty, who has come out to India to keep the house of her brother, the doctor of the 145th. She is a rigid Presbyterian, with a brogue as uncompromising as her doctrine, and a judgment as hard as nails. Never having been tempted to do anything wrong, she is excessively virtuous, and has an eye like a hawk for the misdoings of others; indeed, she is so excellent a detective that she discovers the sins before the sinners have quite made up their minds to commit them. She is the detestation of the regiment, and the colonel's wife has been compelled in consequence to show Miss MacQuirk more attention than she would otherwise have done to make up for the neglect of the others. For never does Miss Maggie pass half-an-hour without hinting at a fresh peccadillo on the part of somebody else. She has a rooted conviction that all soldiers are libertines, not fit to be trusted out of sight of their wives or sisters, and if she has no new misdemeanor to relate on the part of the masters, the servants are sure to come in for their share of abuse; and so Miss Maggie MacQuirk manages to find food for scandal all the year round. Ethel Dunstan ought to know her foibles well enough to mistrust her by this time, and had the doctor's sister come in with some new story of young Freshfield's flirting, or Mr. Masterman's card-playing, she would have been as ready as ever to laugh at the old Scotchwoman's mountainous molehills, and to assure her she was utterly mistaken. But Miss MacQuirk's discourse this morning had a different turn. She had talked exclusively of the latest arrival in Mudlianah—lovely Mrs. Lawless, who has just returned with her husband, Jack Lawless, from staff duty in the north-west provinces, and how her beauty seemed to have addled the heads of all the men of the 145th Bengal Mufitis. And there was a great deal of truth in Miss MacQuirk's assertions, and that is what has made them go home to the heart of Ethel Dunstan. We are all so ready to believe anything that affects our happiness.

(To be continued.)

## THE AGRICULTURIST

### DAIRYING PROPERTIES OF VARIOUS COWS.

The following extracts are from the report on the experiments at the Ontario Agricultural School. Prof. Brown says:—First of all I wish to assert that there is no such thing as a general purpose cow as understood by us. There is no breed of cattle that will fill the butcher's stall, the milk pail, the cheese vat, and the butter-can, as each should be done in these days and must be done in order to attain the desired success. Some can do so to a greater measure than others. Even the world's work of these times is specialties, and no one man is fit to do many things well. Agriculture is speedily and surely dividing herself into grain, flesh, wool, cheese, and butter. No two perfect and distinct products, as now required, can be got from any one breed of cattle or sheep under any sort of conditions anywhere however favorable. I challenge any one to name a breed of cattle or sheep that gives an annual produce equal to the like class of things from two separate breeds that I will name. Of course there are in every breed certain inherent properties that cannot be driven out by any form of unsuitability—whether climate, food or management—and consequently we can build upon their perpetuation in a new land with almost unflinching certainty. What are the requisites of a first-class dairy cow? is the question before us in this enquiry. The cow we want in Ontario for the dairy should give at least twenty pounds of milk per day, on an average of 200 days in the year. We hear often enough of the maximums, and sometimes of the average per season, but never of the minimums. Specific gravity is no true indication of milk quality, and we have tried it by nearly 3,000 observations on ten different breeds of cows within the last three years. The weight of the cream from 100 pounds of milk is the proper criterion and our model dairy cows should always give eight pounds to the hundred. Then again, nearly one-half of that cream should be butter—a high standard no doubt, but as several items that go to make rich milk are largely in our hands, such a proportion can be attained unquestionably. The Durham cow is neither a heavy nor a long milker, comparatively on an average, although some individuals, in the experience of most breeders, are remarkable in both qualities. In the days of their early history they were unquestionably deep and true milkers, but management towards a different object has, during the last 80 years, changed their dairy standard. Though low in specific gravity, the proportion of cream is high, and the quantity of butter from milk the highest of what is illustrated, and possibly second only to the Jersey, which, as yet, we have not had an opportunity to investigate thoroughly. Even in cheese the short-horns are among the best. With this high average we would expect similar characteristics by the use of the native cows of the country—whether one or more crosses; but the table shows no advantage in richness although a very large increase in quantity of milk and duration of the season. This shorthorn grade is undoubtedly the nearest approach we have to what is termed a general purpose cow. In duration of season and quality of milk, the Aberdeen poll is not equal to the Shorthorn, with which it is comparable as a beef producer; and, indeed, it is the lowest of any in quantity, yet giving by specific gravity the richest of all, excepting the Devon. But, in fact, nobody would look to the Aberdeen poll for the dairy. The great beef grazer of England, the Hereford, is in no way better than the Shorthorn and Aberdeen poll in milk quantity; but of any it gives the largest amount of butter from cream fully one half, weight for weight. Its grade is very prominently in advance of it, particularly so in proportion of cream, though one of the lowest in cheesy properties. In all our experimental research no breed can touch the Devon in registering a high specific gravity and weight of cheese from milk; both are unusually high and should be accounted for by the dairy expert. The Devon is also a good average in duration of milking, and, for its size, fair in quantity of milk.

Scotland's hardy beef grazer, the Galloway, has made, in our experience of it at least, one unusual record as a milker, namely, the two per cent. of cream, which is, of course, a very low proportion; but it must be explained that the line between milk and cream was a very distinct one; much cream stood below this line, and always rose slowly, which never separated from the milk. This being evidence in any breed of rich milk, judgment in this case should be cautiously formed. The Ayrshire is a heavy milker, long as well as deep, and on an average will give five times her own weight in milk per season. One may ask here how it is that all our true milkers—the Ayrshire, the Ayrshire grade, Jersey and Canadian—record an average specific gravity of exactly 100, as against the prevailing high record of the beefers and their grades. From five to thirteen per cent. is a big difference in this respect. It does not mean thinness necessarily, for want of cream, as in skimmed milk, gives a higher specific gravity, and pure cream, as is known, will go as low as fifty and thirty. The Ayrshire does not give cream, however, but stands above the average in casein. The Ayrshire, with the Canadian making its grade, is not improved in any respect, in our experience, except one—that is, it continues longer in milk-making, however, a well balanced dairy cow on the hardy side and suitable for some of our districts. The point of the Jersey breed is that one-third of its milk in volume and weight is cream. The *Western Rural* in an article devoted to the specification of the distinctive merits of the different breeds of cattle for dairy purposes, speaking of the Dutch and Danish cattle says:—"The Holstein cow is a large white and black animal, vigorous in constitution, and a great milk producer. But the milk is rich in cheese matter, and poor in butter fats. If the cheese is an object, or the sale of milk is designed, there is no better cow in the world than Holstein." If it were not for the poverty of her milk in the butter element this cow would come nearer to our idea of a general purpose cow than any animal in the world. The beef of this breed is fair in quality.

### A NEW FOWL.

The latest introduction of poultry breeders in America is the Wyandotte, of which we call the following description from the "American Poultry Journal":—"This new breed have so many good points to recommend them, both to the fancier and farmer, that they will surely become very popular. Their plumage is white, heavily laced with black, the tail alone being solid black; the lacing on the breast is peculiarly handsome. They have a small rose comb, close fitted; face and earlobes bright red. Their legs are free from feathers and are of a rich yellow colour. In shape they bear more resemblance to the Dorkings than any other breeds. Hens will weigh 8 lb. to 9 lb., cocks 9 lb. to 10 lb., when full grown. They are very hardy, mature early, and are ready for market at any age. Their flesh is very fine flavored and close-grained, while their yellow skin, model shape, fine plump appearance, particularly adapts them for market. They are extraordinary layers, summer and winter, surprising every breeder at the quantity of eggs they produce. If allowed to sit they make most careful mothers, are content anywhere, and will not attempt to fly over a fence four feet high. Their great beauty and many good qualities make them hosts of friends wherever introduced." Of course we do not commit ourselves to accept all that this claims for the Wyandotte, but perhaps some fanciers who are on the look out for new varieties may import a pen, and then we can judge for ourselves what they are like. While it does not generally pay to keep hens more than two years, a first-class hen mother is an exception. So many are fussy and full of faults that when an uncommonly good one is found she can be wisely saved from year to year, or till she dies of old age. Warmth is the great thing in poultry raising by hand. Keep a chicken properly warm and it can be raised; provided, of course, other things are attended to. But man can furnish warmth as well as a hen if he sets about it with the hen's determination and devotion. A very common mistake with young chicks is to hurry them off the nest as soon as they are dry. They need nothing so much as perfect quiet under the hen for twenty-four hours, or some other place where they can be warm. Nature provides the first day's food.

### BET SUGAR.

#### CALIFORNIA THREATENS TO SUPPLY HER OWN MARKET.

In these days of tariff discussion, reciprocity treaties and contests between rival sugar producers and refiners, the public will read with interest anything about the industry of beet sugar production. We are indebted to the *Record-Union* for some interesting facts on this topic:

The manufacture of beet sugar in California has had many setbacks, and for a long time it was regarded as a problem of very doubtful solution. But the errors and misfortunes which were the natural effects of inexperience have been gradually overcome, until to-day the industry is in every respect a success. The Standard Sugar Refinery at Alameda commenced the manufacture of beet sugar in 1879. In the "campaign" of 1879-80 its production was 1,231,965 pounds; in 1880-81, 1,391,688 pounds; in 1881-82, 1,391,680 pounds; in 1882-83, 1,980,583 pounds, while this year it will be about 1,500,000 pounds, making a total of the five years of about 7,596,000 pounds. We are indebted to Mr. E. H. Dyer, its General Superintendent for the following statement of the business of the month of October last, which is interesting as going to show the items of expense entailed in the manufacture of beet sugar, and the gratifying outcome:

#### STATEMENT OF STANDARD SUGAR REFINERY FOR OCTOBER, 1883.

Acid .....	500 00
Barrels and packing materials.....	842 00
Coke.....	45 10
Bone coal.....	620 00
Drayage.....	67 94
Coal for bone kiln.....	523 20
Filter cloth.....	144 04
Freight on sugar to San Francisco.....	185 40
Incidentals.....	39 00
Insurance.....	310 00
Interest.....	28 62
Lime.....	308 85
Light.....	204 00
Oil, tallow and waste.....	72 00
Petroleum.....	1,650 00
Running repairs.....	174 50
Supplies.....	344 67
Sales expenses.....	133 92
Storage on sugar in San Francisco.....	3 20
Pay-roll.....	3,873 45
Beet root—2,406 88-100 tons @ \$1 60.....	11,071 64
Total.....	\$25,938 05
Sugar produced—341,016 lbs.....	\$34,894 17
Pulp—722 tons, @ \$1.....	722 00
Total.....	\$35,616 17
Expenses as above.....	\$25,938 05
Profit for October.....	\$11,678 14
Total.....	\$35,616 17

It will be seen by this statement that pure white sugar made from beets costs 10.198 cents a pound, laid down in San Francisco. Raw sugar could be produced for refining purposes for less than five cents a pound, in sufficient quantities to supply the present refineries on this coast. Our climate and soil are as well adapted to the production of sugar beets as those of any country where beets have been cultivated for sugar, and are as rich in saccharine, and yield as many tons per acre, the average being about fifteen. There are thousands of acres of the best quality of land on this coast for the production of sugar beets, extending from California to British Columbia, which can be made to produce more sugar per acre than the average cane lands.

On the continent of Europe great improvements have been made in machinery, and technical skill in the manufacture of beet sugar, and the percentage of the saccharine proportion of the beets is greatly increased by intelligent cultivation. More has been accomplished in the improvement of machinery, quality of the beet, and the technical management of business in the last two years than during the ten years preceding. Still the world's consumption of sugar increases faster than the production, and even with the stimulus to sugar growing given by the Hawaiian treaty and what may be expected from the Mexican reciprocity treaty, if it is ratified, we shall soon be forced to resort to the sugar beet to meet the increasing demand. The United States ought to produce the larger portion of the sugar for her own needs, and here on the Pacific Coast we have more land adapted for the cultivation of the beet than Louisiana has for the sugar cane.—S. F. Merchant.

Footo having dined at Merchant Taylor's Hall, he was so well pleased with the entertainment that he sat till most of the company had left the table. At length rising, he said, "Gentlemen, I wish you both a very good night." "Both!" exclaimed one of the company; "Why, you must be drunk, Footo; here are twenty of us." "I have been counting you, and there are just eighteen; and as nine tailors makes a man, I am right. I wish you both a very good night!"